

# EXERCISE FOR FITNESS & BASIC NUTRITION



# Learning Objectives

- Review Benefits of Exercise
- Discuss the Components of Fitness
- “Why Are You Here?”
- Reinforce Safety Factors
- Nutrients & Calories
- Wise Food Choices
- It's All About MATH

# Reasons to Exercise

- Build self esteem
- Control appetite
- Reduce stress
- Decrease fatigue
- Provide fun
- Improve creativity
- Decrease depression
- Build muscular mass
- Increase flexibility
- Strengthen bones
- Reduce fat stores
- Maintain stamina
- Promotes good posture

# Additional Benefits of Exercise

- Raises HDL (good cholesterol)
- Lowers Blood Pressure
- Increases Lung Capacity
- Improve Heart Function
- Lowers Blood Cholesterol
- Manages Weight
- Improves Physical Fitness Assessment (PFA) - formerly PFT



# Components of Fitness

- Cardiovascular Activity
- Muscular Endurance & Strength
- Body Composition (Fat vs. Lean)
- Flexibility

# #1 - Cardiovascular Activity



- This activity, “aerobic”, uses large muscle groups at an intensity that can be sustained for a long period of time
- Includes brisk walking, swimming, biking, stair climbing, hiking, jogging
- Minimum of 3 workouts/week in THRR
- Advantage: Burns calories (250-400/session)

# Target Heart Rate Range

- Calculation:

$220 - \text{Age} = \text{Maximum Heart Rate}$

Target Heart Rate Range (THRR) is  
60-85% of Maximum Heart Rate

THRR:

30 year old: 114-162

40 year old: 108-153

50 year old: 102-145

# THRR (con't)

- Ideal to maintain THRR while exercising to burn calories most efficiently, if  $<$  or  $>$  THRR rate, still burning calories (just less efficiently)
- If beyond THRR, risk of injury is greater than the benefit of exercise



# #2 - Strength Training

- “Anaerobic” exercise - Done for short periods of time to work a major muscle group
- Includes weight training, push-ups, crunches, sprinting
- Advantage: Builds bones, tones muscles - burns 50-250 calories/session

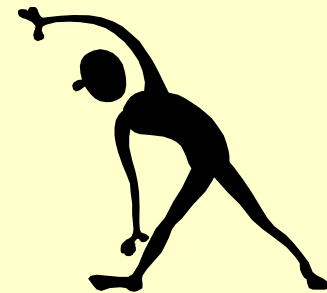


# #3 – Body Composition

- Lean Muscle Mass vs. Body Fat
  - Men = 12%-18% Fit & Healthy
  - Women = 20%-25% Fit & Healthy
- Lean muscle mass weighs more than fat, takes up less space, burns more calories
- Cardio/Aerobic + Strength Training + Moderate Diet = Improved Body Composition

# #4 - Flexibility

- Flex and extend muscles and joints through normal ROM to enhance flexibility:
  - Prevents injury
  - Prevents low back pain
  - Improves quality of life as we age
- Stretch daily - should not be painful
- Don't bounce, hold stretch for 10-30 seconds to a position of mild tension
- Best to stretch when muscles are warm



# Determine Your Goal

## “Why Are You Here??”

- Exercise to Improve Health & Fitness?
- Exercise to Lose Body Fat / Weight?
- Exercise for Minimum Possible Benefit?

# Exercise to Improve Health & Fitness

- **BEGINNER:**
  - Cardio 15-30 mins, 3-5x/wk
  - Strength 2-3x/wk, 1-2 sets, 8-12 reps
  - Flexibility
- **INTERMEDIATE/ADVANCED:**
  - Cardio 30-60 mins, 3-5x/wk
  - Strength 2-3x/wk, 2-3 sets, 8-10 reps
  - Flexibility

# Exercise to Lose Body Fat / Weight

- Cardio:
  - 45-60 mins, 4-6x/wk
  - Shoot for 300 minutes/week of moderate to intense activity
- Strength:
  - 2-3x/wk, 2-3 sets, 8-15 reps
- Flexibility
- Diet...reduce daily intake 300-600 cals/day

# Exercise for Minimum Possible Benefit

- Cardio:
  - 20 mins, 3x/wk
- Strength:
  - 2x/wk, 1 set, 8-12 reps
- Flexibility



# Safety Factors

- Appropriate shoes and fit
- Appropriate clothing
- Padded Surface for all activities
- Reflective Gear, lights
- Helmets
- Identification
- Stay on the beaten path!
- Hydration: 6-8 oz of water/ 15 mins of exercise



# Hot Weather Precautions



- Work out during the cooler part of the day
- Decrease intensity
- Drink plenty of water (6-8 oz/15 mins of exercise)
- Listen to your body
- If relocating, allow 15-30 day for acclimation

# Active Lifestyles

- Walking your dog
- Gardening, mowing the lawn
- Daily household chores
- Park car farther away from destination
- Lap the mall before shopping
- Washing your car
- ...these activities can burn up to 150+ calories!

# Exercise Myths

- Sit-ups will help you lose fat around your stomach.
- If you're exercising and not losing weight, you're doing something wrong.
- Weight training will make you muscle bound.

# More Myths.....

- It's best to exercise in the morning.
- Exercise turns fat into muscle.
- Exercise will injure you.
- You need extra salt after sweating heavily.

# Even More Myths.....

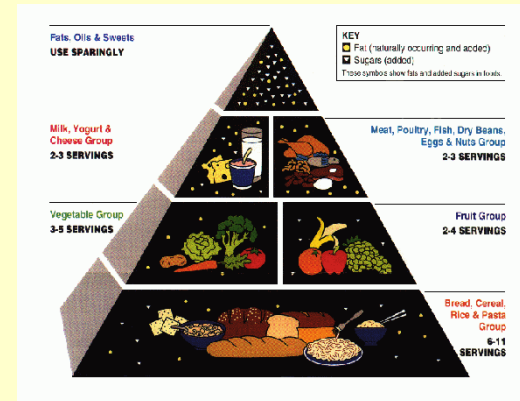
- You should eat more protein if you're trying to increase muscle mass.
- I need to drink Gatorade when I lift weights to give me energy.
- Exercise machines are more effective than free weights.

# Nutrients & Calories

- Calories (ONLY) = Energy
- No Calories = No Energy
- Nutrients:
  - Carbohydrates...4 Cal / Gram
  - Protein...4 Cal / Gram
  - Fat...9 Cal / Gram
  - Alcohol...7 Cal / Gram
- Strive for 50-60C..20-30P..20-25F

# Wise Food Choices

- Eat from the Food Pyramid
- Choose whole grains, high-fiber, low-fat foods
- Eat WHOLE foods instead of processed foods
- Eat a wide variety



# It's All About MATH

- Calories in must be less than calories out or you will gain weight!
- Calories in = FOOD
- Calories out = BMR, activity, exercise
- The best way to sustainable, permanent weight loss and management is regular exercise, an active lifestyle and a varied, low-fat diet



# Summary

- Exercise is essential to your wellness
- Start slowly - Begin, improve, maintain
- Fitness Includes: Cardiovascular and Strength training along with Stretching exercises to promote flexibility...and a varied, low-fat eating plan
- Stay positive, expect success!!

# Resources for YOU

[www.fitday.com](http://www.fitday.com)

[www.usda.gov/cnpp](http://www.usda.gov/cnpp)

[www.muscleandfitness.com](http://www.muscleandfitness.com)

[www.muscleandfitnesshers.com](http://www.muscleandfitnesshers.com)